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Stavros Mavroudeas and Alexis Ioannides

University of Macedonia

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## **'OVERWORKED GREEKS? WORKING TIME TRENDS IN GREECE'**

*Ioannides A. & Mavroudeas S.\**

### **ABSTRACT**

*Today there is increasing evidence supporting the claim that an increasing number of workers around the world are overworked. Although, many researchers have raised the issue of the longer working time, it is usually considered a non-European phenomenon. This paper disputes this perception with reference to the case of Greece and argues that there is convincing evidence that there is a marked increase in actual working time in Greece from the mid-1980s and onward. This tendency is particularly strong for wage earners having a university degree, who are in many cases being labelled as 'cadres' that do not follow the usual work time regulations concerning eight-hour work, weekends, overtime etc. It is also strong in more traditional categories of workers (manufacturing, construction etc.).*

*A statistical and econometric evaluation of the official statistical data—despite their significant limitations that tend to underestimate actual working time—confirms this hypothesis.*

### **INTRODUCTION**

During recent years the issue of the work-time trends has restarted to receive attention in economics. Till recently there was a widespread belief that there is a permanent secular tendency of the work-time to decline—or at least to remain constant. The case of a contemporary resurgence in work time was offhandedly rejected as unrealistic for developed economies. In a nutshell, it was believed—and this continues to be the majority's view—that working time tends to decrease or at least not to increase from the 20<sup>th</sup> century and onwards. It is true that the early decades of the 20<sup>th</sup> century witnessed a dramatic decline of average hours per worker as a result of trade unionist struggle against the long work hours and the exhausting conditions of work that prevailed before. Under this pressure capital ceded a portion of the improved labour productivity in the form of reduced work-time. This was reflected in state legislation which first imposed maximum hours constraints (as exemplified in the English Factory Laws and the US Fair Labor Standards Act) and then, in uneven waves, legislated reductions in work-time for the rest of the 20<sup>th</sup> century. Thus, stability in the level of work hours and standardized work schedules for full-time workers became one of the hallmarks of the postwar era. Consequently, average and median weekly hours remained virtually constant through the 1960s, whereas annual hours continued declining through the 1970s due to the growth in paid holiday and vacation time (see Golden & Figart (2000b), p.2).

\* University of Macedonia, Department of Economic Studies, 156 Egnatia St., Thessaloniki, Greece, E-mail: smavro@uom.gr



However, a growing number of recent studies have cast doubts on these beliefs. Empirically, there is increasing evidence that sometime after the 1973 crisis the declining work-time trend not only ceased but it has been probably reversed. The advent of 'labour flexibility' is the main culprit for this change. During the last 25 years statutory and collectively bargained limits to the length of the workweek are increasingly either neglected or becoming irrelevant. The organization of time moves from the more or less synchronized hours of work and leisure to more multiple and widely differentiated patterns of flexible working time arrangements. The 'standard' workweek gives way to schemes of hours averaging over longer intervals of time and the eight hours workday is violated for increasing sections of the workforce. These trends bring forth the significance of actual working time, as differentiated from the statutory one. Flexibility and destandardisation make statutory arrangements more or less ineffective. On the other hand actual working time (which incorporates overtime, absenteeism, moonlighting etc.) becomes far more important since it can show the real trends in work-time since in many cases a decline in statutory time can co-exist with an increase in actual work time.

Actual working time appears to be rising in many countries and for increasing segments of the working class; whereas, at the same time, other segments become underemployed. However, the first seems to be the dominant trend. For example, there is significant evidence that actual weekly work hours are rising in the United States, Japan and most of the emerging and less developed market economies (see ILO-KILM (1999)). Particularly the case of overworking in the US has been raised by many researchers (see Schor (2000), Bluestone & Rose (1998), Golden & Figart (2000a) etc.). There is ambiguity on what is happening in Europe, where the greater power of the labour movement and the stronger traditions of the welfare state (despite reversals on both planes during the recent decades) have presented greater resistance to the trend of the increasing work hours. Most studies, influenced by the 35 hours movement and particularly its legislation in France, assume that the postwar downward trend is still effective. However, it is usually neglected that statutory decrease can go hand in hand with actual increase in work time. Furthermore, in Southern Europe the trend towards overworking appears to be more pronounced (see Mutari & Figart (2000)).

This paper studies the case of Greece and argues that there is convincing evidence that there is a marked increase in actual working time in Greece from the mid-1980s and onward. This tendency is particularly strong for wage earners having a university degree, who are in many cases being labeled as 'cadres' that do not follow the usual work time regulations concerning eight-hour work, weekends, overtime etc. It is also strong in more traditional categories of workers (manufacturing, construction etc.). In Mavroudeas & Ioannides (2002) we have argued that official statistical data have significant limitations regarding working time (neglect of changes in the structure of employment, increased moonlighting that goes mainly in the 'black sector' economy, increased 'feminization' of work and the peculiar character of self-employed people) and tend to underestimate actual working time. Despite these limitations, an econometric evaluation of the working time trends in Greece confirmed the hypothesis of the increasing working time. In this paper we extend the statistical and econometric evaluation of this hypothesis.



## WORK TIME: EMPIRICAL AND ANALYTICAL ISSUES

Evidence of a rising duration of working time in the last decades has been provided by many studies. Most of them focused on the US and North America. The debate was triggered by Schor's (1991) influential study. Using household surveys of hours from the Current Population Survey (CPS), she found that annual work hours (both paid and unpaid) have increased in the last three decades in the United States. Her claim was echoed by Bluestone & Rose (1998, 2000), who supplemented CPS data with the household survey of the Panel Study of Income Dynamics (PSID) and extended the trend through the mid-1990s. They show that average hours (both weekly and annual) started rising from 1982. This rise has affected both sexes and was stronger among the most highly educated workers.

Other analyses of CPS data gave similar findings. Mishel & Bernstein (1994) and Mishel, Bernstein & Schmitt (1999) have discovered a definite (although smaller than what Schor has calculated) increase of work-time in the USA during the previous three decades. Jacobs & Gerson (1998) agree only partially with Leete & Schor. They argue that it is not the average work-time that is increasing but only the margins of its distribution, i.e. the percentage of those working many hours and the percentage of those working few hours. However, particularly for the USA, they do agree that the percentage of those working more than 50 hours is one of the higher in the world. Heath & Ciscel (1998), also, found that work-time in the USA increased during the 1980s. Additionally, they focused on a rather neglected dimension of this increase: it is total work-time per family that has increased the most and this has serious impact on family and social life.

On the other side, Robinson & Godbey (1997) using time diary evidence argued that total (paid and unpaid) hours have decreased between 1965 and 1995. This triggered a measurement controversy. Robinson & Godbey (1997) argued that time diaries measure actual hours of work more precisely than self-reports as in the CPS and PSID, where workers may overestimate their work time (for example, by systematically neglecting 'on-the-job leisure' during work hours). Schor and others (e.g. Jacobs (1998)) counter-argued that time diaries underestimate actual work time for a number of reasons ('busy person bias', possible neglect of multitasking activities, functional character of 'on-the-job leisure').

Regarding the situation in Europe, certain studies (e.g. Basso (2003)), justifiably argue that it will sooner or later follow the US model. More specifically, Basso (2003: 140-147) – using data from the 'Second European Survey on Working Conditions', which was conducted from the end of 1995 till the beginning of 1996 – maintains that there is significant evidence that the tendency of working time to increase is starting to appear in Europe as well. This tendency, as Basso (2003: 144-145) and Mutari & Figart (2000) argue, is stronger and more evident in the less developed EU countries and particularly in the South European ones (Greece, Italy, Portugal). Bosch (1999), also, has reached the conclusion that work-time in Europe has ceased to decline and in some countries it has started to increase as in the USA. Bosch argues that the greater income inequality in these countries has played an important role in this reversal.

The case of overworking might be controversial and conclusions not unanimous. However evaluations of one crucial aspect of actual working time, overtime, are much more unambiguous.

For the US case, it is clearly rising from the 1982 and onwards, even setting aside cyclical fluctuations (Hetrick (2000)). There is another crucial aspect of overtime: its division between paid and unpaid overtime (see Bell *et al.* (2000)). In many cases it is extremely difficult to record the unpaid overtime in labour data for a number of reasons (e.g. legal consequences). However, it is not rare today workers to concede unpaid overtime work because of the pressure of economic difficulties and the fear of losing their jobs in a stringent period.

All these indicate several well-known problems of measurement regarding actual work time. First, the annual rather than the weekly measurement of actual working time gives a more reliable indicator, because it takes into account vacations, holidays and flexible work time arrangements. Particularly the latter create significant measurement problems. For example, in many countries reductions of statutory working time are given by increasing vacations or decreasing annual work time; thus leaving rather unaffected weekly working time. Second, often second jobs are not accounted for, because they are illegal or semi-legal or for tax evasion purposes (moonlighting). Generally, labour supply data do not include much information on hours and wages in secondary job or overtime work. Finally, in some countries statutory work time is compulsory (and thus affects directly actual work time) whereas in others it simply sets a safety net (and affects less actual work time).

There are also a number of analytical issues regarding the study and explanation of work time trends. Neoclassical economics maintain that work hours reflect workers' individual choices between work (and its reward) and leisure. They also tend to consider unpaid work time as a transitory and paranormal case that cannot be sustained in the long run. Thus increases in the length of the working day tend to be analysed assuming corresponding increases in the daily wage rate, and are presumed to reflect changing 'preferences' of workers in favour of increased income as opposed to a preference for leisure.

In contrast, Marxist analyses emphasize the role of class power in determining the 'normal' hours of work. For Marx (1976, p.344) the establishment of a norm for the working day, presents itself as a struggle between *collective* capital and *collective* labour. Hence, normal hours tend to depend upon the work practice in a given industry or manufacturing process, together with the legislation enacted to set limits on working hours and are not the simple aggregate product of free individual choices.

Finally a number of heterodox approaches adopt institutionalist perspectives and take a middle-of-the-road position between Marxism and neoclassicism. They usually try to supplement the neoclassical labour supply model with elements outside the field of individual preferences (see Golden & Figart (2000b)). Thus they maintain that working time is influenced by and influences an array of cultural norms as well as economic forces. The supply of hours depends upon individual and joint preferences within families that reflect societal expectations, roles, and values.

This paper argues that the Marxist perspective is superior to both the other two approaches. It has a conception of the economic dimension that is both social (as against neoclassical individualism) and production-centered (as against both neoclassicism and institutionalism). Additionally it can grasp wider non-economic social relations (culture etc.) and incorporate



them in its analysis through a coherent process of layered abstractions instead of simply adding them up in a rather unprincipled manner (as most of the institutionalist approaches do). Within this framework, work time is a fundamental variable since it is the source of value and the basis of the operation of the capitalist system (i.e. the exploitation of wage labour through the appropriation of a portion of it as unpaid labour time). Hence surplus-value reflects this unpaid labour time. Struggles concerning the level of surplus-value are fundamentally struggles concerning work time. Particularly the extraction of absolute surplus-value depends upon the increase of normal work time.

## **THE GREEK CASE**

In Greece a marked increase in actual working time can be identified. This tendency is particularly strong for wage-earners having a university degree, who are in many cases being labeled as 'cadres' that do not follow the usual work time regulations concerning eight hour work, weekends, overtime etc. It is also strong in more traditional categories of workers (manufacturing, construction etc.).

### **Measurement Problems**

Official statistical data have significant limitations that tend to underestimate actual working time. However, despite these drawbacks, even when using the available statistical data, there are significant indications supporting our approach.

The first problem with the data has to do with the change in the structure of employment. With more people working under part-time and part-year contingent contracts, with significant increase in moonlighting, and with substantial increases in overtime (at least in manufacturing), the movement towards 'non-standard' work-weeks and work-years is growing. Yet the standard statistics hardly measure this. In Greece, as elsewhere, the increase of working time is not always happening through the official channels (for example, the extra hours in the private sector are rarely reported in the purpose of saving the insurance charges), therefore it is usually underestimated by the official data.

Second, there is a marked increase of moonlighting in the recent years. These second jobs are usually underreported in order to avoid taxes and social insurance charges. Additionally, a great part of moonlighting takes place in the so-called 'black economy', which is notoriously big in Greece and of course it is not accounted for adequately. However, there is significant evidence that not only part-time work is increasing but also that moonlighting constitutes a great part of it. These moonlighting hours have to be added on top of the officially measured real working time.

A third problem arises from a basic feature of the Greek Economy: the existence of big sectors of economic activity, where self-employment is the main mode of employment. In fact this means that workers have to 'buy' their jobs. During the last years this mode of employment has expanded in new sectors of economic activity. Under this type of employment workers usually work more than average, under fully flexible work schedules. The expansion of this mode of employment indicates an increase on real working time, which is not usually accounted

in official data. This Greek peculiarity is enhanced by the universal trend for increasingly blurring boundaries between work and non-work time. Capitalist restructuring (following both traditional and new technology paths) destroys the traditional division of work and family. This process—which affects also ‘typical’ workers—has even stronger repercussions on this stratum of self-employed workers who become the champions of working time increases.

### ‘Feminisation’ of Work

Another important factor is the growing participation of women in the labour market (see Table 1). This participation is more inclined towards flexible work arrangements and in many cases belongs to the informal or ‘black’ economy (and thus it cannot be easily measured). This growing ‘feminisation’ of the work force means a major increase in the work time needed for the reproduction of the working class’ families since another member of a working class’ family performs wage labour and has to recuperate from its attrition. At the same time it contributes additional labour (both paid and unpaid) to the capitalist system.

**Table 1**  
**Percentage of Female Labor Force Participation in Greece**

<i>Year</i>	<i>1980</i>	<i>1990</i>	<i>1995</i>	<i>2000</i>
Labour Force, female (% of total labour force)	28	35	37	38

Source: World Bank (<http://devdata.worldbank.org/genderstats>)

### Work Time Data

Setting aside all these problems of underestimation, a first glance indication is given by the legislation for the daily and weekly working time in combination with the statistics for the real working time per employee. Data about working time are being collected by the Labour Force Survey of the National Statistical Service of Greece (NSSG) from the 1974 and onward. However, there exist similar data from older types of survey of NSSG from the 1960s. From 1981, it is conducted according to the rules of EUROSTAT, which have been revised in 1983. EUROSTAT, ILO (International Labour Organization) and OECD estimations and studies are mainly based on this set of data. NSSG’s Labour Force Survey is a household survey covering all the country and conducted yearly. Hours of work refer to the number of hours actually worked during the reference week in first job or business. This includes all hours including extra hours regardless of whether they were paid or not. Persons who have also worked at home (e.g. teachers preparing lessons) are asked to include the number of hours they have worked at home. Unfortunately, the Labour Force Survey provides data for the mean working time in Greece for the year 1987 and afterwards. We have to turn to some other source to collect the data that are necessary for an econometric evaluation of the working time trend. The only statistical survey that can provide such evidence for Greece is the Labour Statistics of the NSSG. They are quarterly surveys investigating wages and occupation in Manufacturing, Mining, Commerce, Energy, Banking and Insurance sectors. They include data only for the paid working time, excluding working time that has been worked but not paid. As mentioned above, this leads to the underestimation



both of the working time and the possible upward trend that exhibits. Nevertheless, in the absence of any other set of data covering the last 40 years period in Greece we have to rely upon them, as some ILO and OECD estimations and studies are doing so.

According to these data (Table 2) there is an increase in actual weekly working time in Greek Economy, from 1986 till 1998 (the last available data).

**Table 2**  
**Actual Average Work time in Greece**

<i>Years</i>	<i>Average Weekly Hours</i>
1962	44,08
1963	43,38
1964	43,95
1965	43,78
1966	43,3
1967	43,55
1968	43,7
1969	43,8
1970	44,63
1971	44,13
1972	44,58
1973	43,73
1974	43,8
1975	42,7
1976	41,83
1977	41,05
1978	41,25
1979	41,18
1980	40,7
1981	39,53
1982	38,6
1983	38,53
1984	38,18
1985	39,25
1986	39,2
1987	39,25
1988	41,13
1989	41,1
1990	41,08
1991	41,08
1992	41,08
1993	41,09
1994	41,85
1995	41,13
1996	41,18
1997	40,87
1998	41,13

*Source:* OECD Statistical Compendium, Labour Statistics NSSG.

ILO's Key Indicators of The Labour Market (Kilm), using the same data set has estimated the actual annual hours worked per employee—broken by males and females—for the period 1990-94. Annual estimations, as explained before, can capture better the contemporary tendency



towards flexible labour arrangements. Again, in the case of annual hours, the tendency of the real working time to increase is evident for both sexes.

**Table 3**  
**Annual Hours Worked Per person**

<i>Years</i>	<i>Males</i>	<i>Females</i>
1990	819.7	735.7
1991	830.1	738.7
1992	854.8	757.5
1993	860.7	759.8
1994	851.2	755.7

*Source:* ILO - KILM

Other, less extensive, surveys have similar findings. For example, a survey conducted by the pollster company METRON ANALYSIS, commissioned by the Ministry of Labour found even more pronounced results. The survey—which covered the whole country, was conducted from 14/9/2000 till 29/9/2000, used a three-stage sampling process and had an effective sample of 2.473 persons—found that the average real working time for private sector workers is 44.3 hours, while for public sector workers is 37.8—by far higher than the hours dictated by the 8 hours per day legal limit (METRON ANALYSIS (2000, p.3). A big section of the employees (42.9%) declared that they work more than what is legally provisioned in their main or sole occupation. Additionally, 30% of the employees declared that their overtime work is not paid, while only 13.6% declared that it is paid but not sufficiently enough.

## **AN ECONOMETRIC EVALUATION OF THE WORKING TIME TRENDS**

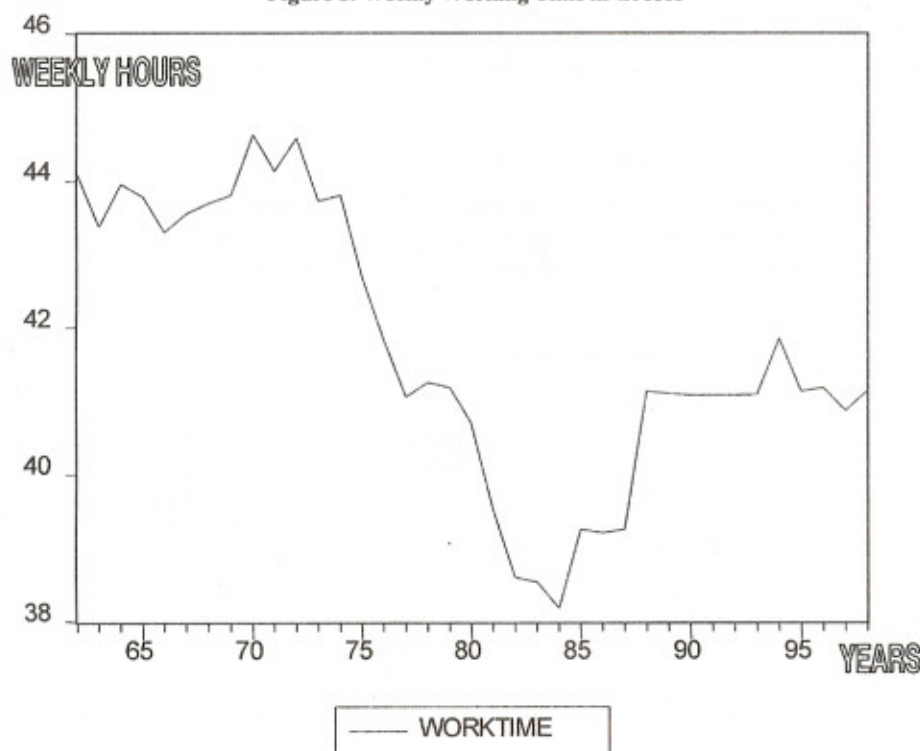
We assume that if the data exhibit a time trend this would be a deterministic rather than a stochastic one. This is because a great percentage of the driving forces of this process are external to the economic system and they are the outcome of a plan, usually made from governments and/or the employers associations (in high 'correlation' with the working class resistance). This assumption is not indisputable of course, since the trend could also be the outcome of cumulative distortions that take place at the level of every single enterprise.

Under the previous assumption we will show that there is a statically significant time trend in the working time series for Greece and there is also a structural change affecting the slope of the trend.

The data for working time are plotted in Figure 1. We can visually identify two possible break points, the first at the years 1972-1973 and the second between 1984 and 1985. These two possible break points are consistent with important events that affected the economy, such as the oil crisis in 1973 and the announcement of the new economic policy for Greece after the second electoral victory of PASOK in 1985. Since our point is to show a rise in working time during the last years we will check only for the second possible break point.

The equation we use is linear since it is the simplest and more intuitive specification and since we have no economic reason to assume a higher order polynomial. In addition to this is the form of the line graph of the data plotted in figure 1.

Figure 1: Weekly Working Time in Greece



$$Y_t = C(1) + C(3)*t + e_t \quad (1)$$

Where  $Y_t$  is the work time

$t$  is for time

$e_t$  is a disturbance term and

$C(1)$ ,  $C(3)$  are the constant term and the slope coefficient to be estimated.

To test for the possible structural change we will use a dummy variable ( $d$ ) which equals zero for the years before 1985 and one thereafter. So the equation will take the form

$$Y_t = C(1) + C(2)*d + C(3)*t + C(4)*t*d + e_t \quad (2)$$

Where  $C(2)$  and  $C(4)$  are the coefficients associated with the dummy variable.

The sample we used is from 1972 to 1998. The reason for neglecting previous years is that we mainly want to check the behavior of the working time after the 1973 crisis, since the underlying assumption is that recent trends in working time are generated by the permanent effects and the attempt of overcoming this crisis. This assumption will also help us to use only one dummy variable in our equation, avoiding over specification problems.

The estimation of equation (2) (more specifically the Durbin-Watson statistic) indicates the existence of serial correlation among the residuals. The same conclusion is reinforced by the  $Q$ -statistics. In the case of serially correlated residuals the estimators  $C(1)$  till  $C(4)$  will be



biased. The existence of serial correlation in the residuals was rather expected, since working time is affected in the short run by business cycles.

To overcome this problem we implement a second order autoregressive error of the form:

$$e_t = \phi_1 e_{t-1} + \phi_2 e_{t-2} + \varepsilon_t \quad (3)$$

where  $\varepsilon_t$  is independently and identically distributed (i.i.d.).

The above formulation allows capturing the cyclical component of the series. Equation (2), with an AR(2) process for the error term, was estimated using the Non-linear Least Squares method (with the help of the econometric package EViews). The results are shown in Table 5.

**Table 5**  
Estimation outputs for equation (2) (NLS)

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C(1)	44.37380	0.342510	129.5548	0.0000
C(2)	-6.456084	0.908786	-7.104076	0.0000
C(3)	-0.527863	0.047401	-11.13618	0.0000
C(4)	0.672779	0.063932	10.52342	0.0000
C(5)	0.463103	0.209634	2.209102	0.0384
C(6)	-0.252611	0.219060	-1.153164	0.2618
R-squared	0.917048	Mean dependent var		40.96593
Adjusted R-squared	0.897298	S.D. dependent var		1.569459
S.E. of regression	0.502968	Akaike info criterion		1.656548
Sum squared resid	5.312505	Schwarz criterion		1.944512
Log likelihood	-16.36340	Durbin-Watson stat		2.035307

The fit of the equation to the data is now better than in the previous case. The first two coefficients (C(1), C(2)) represent the constant term (before and after the structural change) and have no economic meaning. C(3), which is the slope of the linear equation until the structural change, is negative and statistically significant, as should be expected after viewing the plotted data. C(4) has to be added to C(3), to give the slope of the equation after the break point year of 1985. The statistical significance of C(4) proves that working time does not exhibit a constant trend throughout the period under examination (Mills, 2003, p.16). Further, the absolute value of C(4), which is bigger than the absolute value of C(3), shows that the downward trend of working time is reversed to an upward trend for the years after 1985. The coefficients C(5) and C(6) are the estimators of  $\phi_1$  and  $\phi_2$  respectively.

Formally, the estimation gives us the following equations describing the phenomenon before and after 1985:

$$Y_t = 44,3738 - 0,527863 * t + e_t \quad (\text{for } t \text{ before } 1985) \quad (4)$$

and

$$Y_t = 37,917716 + 0,1449161 * t + e_t \quad (\text{for } t \text{ after } 1985) \quad (5)$$

From equations (4) and (5) we can conclude that there was a statistically significant downward trend in working time from 1973 till the change of economic policy in 1985. After that year the trend changes sign (remaining significant), but the upward movement is now to a

smaller degree. This was expected, since it is rather easier to reduce than to increase the working time due to political reasons. Besides, we estimate that the major part of the actual rise in working time is most of the times invisible by the official statistics and occurs also through other channels like second job, the rise of number of workers in each family etc.

All these findings confirm the hypothesis of the increasing working time in the Greek Economy.

### **Work Time Trends in the Basic Productive Sectors of the Greek Economy**

In this section we study the available work time data for three major productive sectors of the Greek economy: manufacturing, constructions and transportation-communications. The best available data are from 1987 and onwards. Previous data are incompatible with the new series. The choice of these sectors reflects the Marxian preoccupation with those sectors of the economy where productive labour is performed (as distinguished from unproductive wage labour). It is in these sectors that surplus-value is produced and therefore the increase or not of work time is particularly relevant.

It would be interesting to check also other sectors of the economy and particularly the tertiary sectors because there are empirical signs that overworking affects them as well. Two points are important here. First, that some activities that were considered traditionally as services and unproductive have nowadays changed character. Second, that the unproductive activities have significant macroeconomic effects since they entitle their capitalists to get a share of total surplus-value produced in the economy as a whole. However, the available Greek data are extremely problematic since their classifications have changed radically several times.

#### **1. Manufacturing**

The data for the weekly working time in the manufacturing sector are shown in Table 6

**Table 6**  
**Weekly Working Hours in Manufacturing**

<i>Years</i>	<i>Actual weekly work hours</i>
1987	40
1988	41
1989	41
1990	41
1991	42
1992	43
1993	42
1994	42
1995	42
1996	42
1997	42
1998	42*
1999	42
2000	43

\* Average of the years 1997 and 1999 because they do not exist data for this year.

Source: NSSG



As we can observe, the data are rounded off to integers. This causes a lack of the appropriate accuracy necessary for our tests. A big part of the work time variations are lost because of this reason. A second problem with the data is the small time period they cover, especially when it is known from the total sectors working time trend that the missing years are important. Finally the 1993 change of classification system, although limited for the examined sectors, affects the continuity of the data. The technique is the same used in the general case, but we don't search for a break point here. The equation under estimation is the following:

$$Y_t = C(1) + C(2)*t + e_t \quad (6)$$

The type of the correlation of the residuals indicates a first order autoregressive form for the error term and the estimated equation is:

$$Y_t = 41,33856 + 0,093360*t + e_t \quad (7)$$

The coefficient  $C(1)$  has no economic meaning. The estimated  $C(2)$  coefficient is positive and statistically significant at the 87% level of significance. This indicates the existence of an upward trend for weekly working time. The relatively low level of significance may be due to the small sample period, the rounding off and the change of classification system mentioned above, or due to the informal ways through which is achieved the increase in working time.

## 2. Constructions

The data for the weekly working time in the manufacturing sector are shown in Table 7.

**Table 7**  
**Weekly working hours in Constructions**

<i>Years</i>	<i>Actual weekly work hours</i>
1987	36
1988	38
1989	39
1990	38
1991	40
1992	39
1993	40
1994	40
1995	40
1996	40
1997	40
1998	40.5*
1999	41
2000	41

\* Average of the years 1997 and 1999 because they do not exist data for this year.

Source: NSSG

The problems concerning the data, mentioned in the previous case, hold in this case too. The estimation of the equation (6) was conducted with the use of a second order autoregressive form for the error term. The estimated equation is:

$$Y_t = 38,41299 + 0,189033 * t + e_t \quad (8)$$

The coefficient C(2) is positive and statistically important at the 99% level of significance. This indicates an upward trend for working time in the construction sector.

### 3. Transport-Communications

The data for the weekly working time in the transport-communications sector are shown in Table 8.

**Table 8**  
**Weekly working hours in Transport-Communications**

<i>Years</i>	<i>Actual weekly work hours</i>
1987	44
1988	44
1989	44
1990	44
1991	45
1992	45
1993	46
1994	46
1995	46
1996	46
1997	46
1998	46*
1999	46
2000	46

\* Average of the years 1997 and 1999 because they do not exist data for this year.

Source: NSSG

Using the same technique as in the manufacturing sector we estimate equation (6) for the sector of transportations and communications. The estimated equation is:

$$Y_t = 44,40448 + 0,143357 * t + e_t \quad (9)$$

The C(2) coefficient is positive again and significant at the 79% level of significance. We can't be positive about rejecting the null hypothesis in this case. All the previously mentioned explanations about the quality of data still hold for this sector. One additional explanation is, of course, the already very high level of weekly working time in this sector, which makes a possible upward trend much more difficult to occur and to be counted.

## CONCLUSIONS

If the hypothesis of overworking is verified for Greece this, in our opinion, would mark the renewed significance of the extraction of absolute surplus-value. In Mavroudeas & Ioannides (2002) we have argued that contemporary capitalist restructuring, following the 1973 structural crisis and the subsequent long downturn, strives to construct a new era or a new stage of capitalism. This new stage will be based on a new configuration of absolute and relative surplus-value. Contrary to the previous capitalist stage where absolute surplus-value played a lesser



role, nowadays absolute surplus-value is upgraded. This does not imply that relative surplus-value ceases to be dominant but rather that the equilibrium between them is changing under the permanent hegemony of relative surplus-value. In the Greek case the increased significance of absolute surplus-value is accentuated by the participation of the Greek economy in the European Union. As Carchedi (1999) has shown, particularly the European Monetary Union (EMU) project of the EU obliges less developed European economies to intensify the extraction of surplus-value and particularly absolute surplus-value.

These developments may support profitability but will definitely worsen labourers' working and pay conditions.

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